

Case 3022***Catalogue des mammifères du Muséum National d'Histoire Naturelle* by Étienne Geoffroy Saint-Hilaire (1803): proposed placement on the Official List of Works Approved as Available for Zoological Nomenclature**

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Abstract. At least 24 generic and specific names for mammals established by Étienne Geoffroy Saint-Hilaire in his 1803 *Catalogue des mammifères du Muséum National d'Histoire Naturelle* (Paris) have been treated as available and valid and have been used, some very widely. Nevertheless, the status of the *Catalogue* as an available work has been challenged periodically between 1922 and 1993. Even though in 1963 the *Catalogue* had been shown to satisfy the criteria for publication, it was considered to be unavailable in *Mammal species of the world* edited by Wilson & Reeder (1993). The present application proposes that the nomenclatural instability be resolved by placing the work on the Official List of Works Approved as Available for Zoological Nomenclature. The generic name *Scalopus* and five specific names of Geoffroy (1803) would require individual conservation if the *Catalogue* were to be treated as unavailable. In March 1971 (Opinion 945) the specific name of *Sciurus* (currently *Xerus* or *Euxerus*) *erythropus* for the Subsaharan ground squirrel was placed on the Official List with authorship and date attributed to Geoffroy (1803).

Keywords. Nomenclature; taxonomy; Mammalia; Étienne Geoffroy Saint-Hilaire; *Catalogue des mammifères du Muséum National d'Histoire Naturelle* (1803); *Scalopus*; *Pteropus rufus*; *Saguinus niger*; *Canis niloticus*; *Proechimys guyannensis*; *Herpailurus yagouaroundi*; moles; grass rats; fruit bats; tamarin monkeys; red foxes; jaguarundis; spiny rats.

1. In 1803 Étienne Geoffroy Saint-Hilaire produced the *Catalogue des mammifères du Muséum National d'Histoire Naturelle*, a book of 272 numbered pages in octavo describing over 290 species represented by specimens in the Paris Museum. Over 60 species were considered to be new (Table 1) and Geoffroy's names for them were used by Desmarest (1804a, 1804b, 1816–1819, 1820–1822) and numerous other authors (Tables 1 and 2). The status of the *Catalogue* has been questioned on the suggested grounds that it was never published. Following a submission by J.R. Ellerman and T.C.S. Morrison-Scott, an attempt was made to declare the work unavailable by Dr W.E. China (BZN 19: 289, September 1962), then Assistant Secretary to the Commission, but this was later withdrawn (China, BZN 20: 243, July 1963) in the light of comments made by Prof L.B. Holthuis (BZN 20: 242) who argued that the work had been published in the sense of the Code and was therefore available. Without addressing this episode, Wilson & Reeder (1993) in *Mammal species of the*

world considered the *Catalogue* to be unavailable. Some authors use Geoffroy's (1803) names and others do not. Different names are in use for the same taxon and different authors and dates are cited for the same name. It is very desirable that this instability be resolved and that the Commission be asked to rule on its status.

2. One generic and some 23 species-group names are in use as valid names for mammal taxa and all have been acknowledged in the literature as established by Geoffroy (1803). Under each name there is a full description of specimens then in Paris. Two generic (*Civetta* and *Setiger*) and two species-group names (*Phyllostoma emarginata* and *Hyaena fusca*) established by Geoffroy (1803) have remained unadopted by subsequent authors and there are junior synonyms in current use; these Geoffroy names are nomina oblita under Article 23.9 of the Code. There are also two emended generic names and five names that can be categorised as junior homonyms.

3. After the distribution of the (1803) *Catalogue*, Desmarest reported many of Geoffroy's names in the last volume of the *Nouveau dictionnaire d'histoire naturelle* in 1804, and then in the new edition of *Nouveau dictionnaire* (1816–1819) and the *Encyclopédie méthodique: Mammalogie* (1820, 1822). Desmarest fully recognised that Geoffroy had been responsible for distinguishing the species that he, Geoffroy, had named. Desmarest alluded to Geoffroy as the author of the names at every opportunity, commonly citing their source as the '*Catalogue de la Collect. du Muséum d'hist. natur.*', or in a more abbreviated form (Table 1). If the *Catalogue* were to be treated as unavailable, Desmarest should not be cited as the author of the names first published by Geoffroy; 'Geoffroy in Desmarest' would undoubtedly be a much more appropriate and accurate attribution. Desmarest's citations of Geoffroy's names are usually correct, though it is apparent that two were misquoted since Desmarest attributed his new names to Geoffroy (*Canis aegyptiacus* in place of *C. niloticus* and *Echimys cayennensis* in place of *Mus guyannensis*; Table 1). A number of Geoffroy's names have been omitted by major checklists even though they could be cited from Étienne Geoffroy in Desmarest or Isidore Geoffroy (Étienne Geoffroy's son) should Geoffroy (1803) be treated as unavailable; they are *Scalops* as an emendation of *Scalopus*, *Phyllostoma emarginata*, *Mustela rufa*, *M. javanica*, *Canis decussatus*, *C. argentatus* (originally of Shaw), *Civetta fasciata* and *Cervus coronatus*.

4. Opposition to the recognition of Geoffroy's (1803) work as available has come from authors cited in Wilson & Reeder (1993), including Sherborn (1922), Pocock (1939), Ellermann & Morrison-Scott (1951), Laurie & Hill (1954) and Harrison (1964). Sherborn (1922, p. lviii) stated that 'There is a long note on this work by I. Geoffroy in *Mag. de Zool.* (2)1, 1839, Mamm. p. 5, clearly stating that it was a mere MS [there is no such comment], and though it had been quoted, it was 'un ouvrage que son auteur avait condamné à l'oubli' '. Pocock (1939, p. 364, footnote) wrote that 'Since only a few copies of this work were printed and privately given to friends by Geoffroy, its publication is open to doubt and Desmarest may be regarded as the author of the name [*Viverra indica*], although he gave Geoffroy the credit of it'. Ellerman & Morrison-Scott (1951) discussed a number of Geoffroy's names: for example, *Erinaceus aegyptius* Fischer, 1829 was (p. 24) 'based on *E. aegyptius* Geoffroy, Cat. Mus. H. N. Paris, 1803, which was never published; proof sheets only are known (Chaworth-Musters [ms])'; *Civetta indica* (p. 282) 'is not valid from Geoffroy, since, according to Sherborn, Geoffroy's work was never published, and this was admitted by Pocock, 1939'; *Manis crassicaudatus* of Geoffroy was attributed

to Gray (1827); *Erinaceus suillus*, *E. caninus*, *Castor galliae*, *Cricetus vulgaris*, *Lemmus arvalis* (not of Pallas), and *Lemmus fulvus* were all treated as unavailable, as according to Sherborn these names were never published (however, *Cricetus vulgaris* was not established by Geoffroy and *L. fulvus* is available from [Geoffroy in] Desmarest, 1816). The name *Mus alexandrinus* Geoffroy, 1803 (p. 192) was adopted under *Rattus rattus alexandrinus* but the authors (in China, BZN 19: 288, September 1962) later acknowledged this inconsistency. They did not query that *Lemmus niloticus* Geoffroy, 1803 was the type species of *Arvicanthis* Lesson, 1842. Setzer (1952, p. 366) was perhaps the first to explicitly support availability for the *Catalogue*. He remarked that Geoffroy's names conform to Linnaean nomenclature and went on to say: 'It is believed that the statement of Isidore Geoffroy St-Hilaire [1839] to the effect that his father never intended the above work for a scientific treatise should not be accepted, inasmuch as the work is clear, concise and was published and circulated'. Laurie & Hill (1954, pp. 14, 100), citing Ellerman & Morrison-Scott (1951) for support, stated that 'This work is not nomenclatorially available as only a few copies were printed which Geoffroy gave privately to colleagues'. Ellerman & Morrison-Scott (1954) reiterated that the *Catalogue* was never published: 'This is made quite clear by I. Geoffroy, 1839 ... and the work was rejected by Sherborn. Setzer thought that I. Geoffroy said that his father's work had been published [this is not evident from what Setzer himself wrote]. But it transpired in litt. that Setzer [1952] was relying on a faulty rendering of the French text'. Up to this time quotation of the son's comments on his father's *Catalogue* had been limited to Isidore Geoffroy (1839), who stated it was unpublished ('*inédit*') yet gained wide publicity through the distribution of copies, although it had been doomed to oblivion ('*condamné à l'oubli*') by his father.

5. Hershkovitz (1955) provided the first modern examination of the history of Étienne Geoffroy's (1803) *Catalogue* (see para. 6 below), noting that Isidore Geoffroy (1847) had listed his father's *Catalogue* among the latter's other published works: the earlier (1839) comment that it was unpublished was an expression of his father's attitude to the *Catalogue*. Ellerman & Morrison-Scott (in China, BZN 19: 288, September 1962) remained unmoved: 'Anyway, Sherborn, a bibliographer with a reputation second to none, held the same view as we do, namely that É. Geoffroy's *Catalogue des mammifères* was never published, though part of the ms reached the printed stage, and was subsequently distributed to colleagues'. They averred (p. 287) that a work remains a manuscript or proof (they called the *Catalogue* a 'printed proof'), even if it had been 'distributed and consistently cited', up to the point where the distribution of copies became 'general'. Isidore Geoffroy's (1847) listing of the *Catalogue* as published 'cannot be held to be a critical judgement' (p. 287) that could override the earlier (1839) statement that it was '*inédit*'. Ellerman & Morrison-Scott sought to disagree with Hershkovitz (1955) by stressing that Geoffroy had abandoned production of the book and had not renounced it once published, but Hershkovitz was not trying to make this point. In the same paper, China (BZN 19: 289) requested the Commission to place the *Catalogue* on the Official Index of Rejected and Invalid Works in Zoological Nomenclature. But in response Holthuis (BZN 20: 242, July 1963) noted that 'After examination of the copy of this publication in the Leiden Museum and after consulting the Code and especially Article 8, I cannot see why this book should be considered as not published. It is

reproduced in ink on paper by regular printing, it is issued for the purpose of scientific, public and permanent record, and it was distributed free. In our copy the following citation is written on the fly leaf: '*Le catalogue des Mammifères du Muséum national d'histoire naturelle*, rédigé par Étienne Geoffroy Saint-Hilaire, imprimé en 1803 n'a jamais été mis en vente; mais il a été distribué, tant à l'étranger qu'en France, à un assez grand nombre de zoologistes, et il est cité dans tous les traités de mammalogie. Cf. *Catalogue méthodique de la collection des Mammifères de la collection des oiseaux et des collection annexes* par M. Isidore G. St. Hilaire et M.M. Florent Prévost et Pucheran, Paris, 1851. Introduction V, et note 2'. As the book has been printed, properly distributed and cited in all or practically all important mammological treatises, as is confirmed by our Curator of Mammals, Mr A.M. Husson, I do not see any reason why this book should be unavailable nomenclatorially or even why it should be suppressed. Mr Husson believes that a suppression of this work will cause an undesirably great number of changes in currently adopted names in mammalogy'. Holthuis's views were supported (BZN 20: 245) by Dr E. Raymond Hall (*University of Kansas, Lawrence, Kansas, U.S.A.*) and by Dr Jean Dorst (*Muséum National d'Histoire Naturelle, Paris, France*). In the light of these comments, China (BZN 20: 243) withdrew his request to put the *Catalogue* on the Index (and in March 1971, Opinion 945, the specific name of *Sciurus* (currently *Xerus* or *Euxerus*) *erythropus* for the Subsaharan ground squirrel was placed on the Official List with authorship and date attributed to Geoffroy, 1803). Without addressing the 1962–1963 discussion, Harrison (1964, p. 19) cited verbatim the remarks of Ellerman & Morrison-Scott (1951, p. 24) on *Erinaceus aegyptius* Geoffroy, 1803, and its unavailability; and Rosevear (1969) stated that 'There is considerable argument about the availability of Geoffroy's *Catalogue* which is said never to have been properly published and is thus usually regarded as unavailable'. Husson (1978, p. xx) took up its support: 'The arguments brought forward by L.B. Holthuis (1963: 242) to show that Geoffroy's *Catalogue* must be considered published, are fully shared by me, and I see no reason to reject Geoffroy's names, which are widely accepted in zoological literature; quite a number of authors ... do accept Geoffroy's *Catalogue* is available'. Hill (1980) stated that 'Holthuis (1963: 242) has argued convincingly that it fulfils the modern criteria for publication'. Corbet & Hill (1992, p. 439) commented that it 'Has been considered unavailable for nomenclatural purposes but reasons for accepting it were given by Hill (1980)'. The first edition of *Mammals of the world* (Honacki, Kinman & Koeppl, 1982) accepted Geoffroy's (1803) *Catalogue* as available, but in the second edition Wilson & Reeder (1993) took the view that it was unavailable, noting that 'a formal proposal to the International Commission on Zoological Nomenclature should be made regarding this matter'. In their review of the 1993 edition Corbet & Hill (1994) noted 'The work of Geoffroy (1803) is specifically discussed and rejected in Appendix I on the basis of several older references, but a more recent case for its retention, summarized by Hill (1980: 287), has been ignored'.

6. Authors who have considered the (1803) *Catalogue* to be unavailable have said that it was never published or its publication is open to doubt; that it is a mere manuscript or known only as proof sheets; that it is part of a manuscript that reached the printed stage; or that it is a printed proof that was distributed to various colleagues: only a few copies were printed which were privately given to friends or

colleagues. These descriptions convey an impression of uncertainty that is not borne out in the following history of the *Catalogue*, a paraphrase of Isidore Geoffroy's (1839, 1847, 1851) accounts, including Hershkovitz's (1955) translation. Étienne Geoffroy commenced work on his *Catalogue* before he went to Egypt in 1798 and continued on his return in 1801. Printing of the *Catalogue* was well advanced when he fell ill and was forced to leave completion, including proof reading, to an older student who apparently was little versed in zoology. On recovery, Geoffroy found serious errors in the text (presumably the final printed version) and abandoned his aim to publish, at first intending to pulp the *Catalogue* ('condamné au pilon'). Geoffroy's friends, Cuvier in particular, saved it from destruction and oblivion ('sauvé par Cuvier de l'oubli') by persuading him to reconsider his intentions. Geoffroy did not agree to complete the outstanding pages on sheep, cattle and cetaceans, nor did he put the work on sale, yet he sent copies to colleagues and naturalists with whom he was in correspondence. The *Catalogue* had been printed, published and distributed in France and abroad, according to Isidore Geoffroy, and was cited in all treatises on mammalogy thereby achieving wide publicity.

7. There is no doubt that Étienne Geoffroy abandoned production of the *Catalogue*. There is also no doubt that multiple copies were printed and circulated. Possibly the whole print-run of partially made-up copies had already been completed when Geoffroy gave up the idea of publishing and spoke of pulping the *Catalogue*. It seems likely that he was persuaded to distribute copies that already existed. Circulation may have been as extensive as for similar material published in the early 19th century when important works in zoology were often supplied only to subscribers. In any case, Geoffroy's *Catalogue* was distributed to many zoologists in France and abroad (para. 5 above). Copies exist in Leiden, Paris, London and Washington and probably elsewhere. It seems inappropriate to call the work a proof or a manuscript when multiple copies were issued even if each one remained incomplete. Too much significance has been placed on contradictory remarks concerning publication. The *Catalogue* did not go through all the conventional stages of publishing, yet by extensive dissemination it became published in accordance with the Code. This is the conclusion that numerous distinguished mammalogists have tacitly adopted (Table 2).

8. Geoffroy's (1803) names refer to long accepted concepts and usages and, as a means of promoting stability in mammalian nomenclature, all the names should be maintained with this authorship. As noted in para. 3 above, the names for a number of the taxa first described by Geoffroy (1803) would be available from later authors (Desmarest, 1804a, 1804b, 1816–1819, 1820–1822, and Fischer, 1829) with their accustomed meanings. The situation is not so simple with those of Geoffroy's names that are not available from subsequent authors, and in these cases rejection of Geoffroy's work would result in a highly undesirable change of name and thus widespread and unnecessary confusion:

- (a) The universally accepted name *Scalopus* Geoffroy, 1803 for the mole of Eastern North America (Insectivora, TALPIDAE, SCALOPINAE) would be replaced by *Scalops* Desmarest, 1804. The name *Scalopus* was wrongly attributed to Desmarest (1804b, p. 14) in Wilson & Reeder (1993, p. 127).
- (b) The widely accepted name *Pteropus rufus* Geoffroy, 1803 for the Madagascan fruit bat (Chiroptera, PTEROPIDAE) would be replaced by *P. edwardsii*

É. Geoffroy, 1810. Wilson & Reeder (1993, p. 150) replaced *P. rufus* Geoffroy, 1803 with *P. rufus* Tiedemann, 1808 (p. 535), but this name refers to the Mauritian species and is a junior synonym of *P. niger* Kerr, 1792 (see Andersen, 1912, p. 215).

- (c) The name *Saguinus midas niger* Geoffroy, 1803, which has been in universal usage for the last several decades for the South American black-handed tamarin monkey (Primates, CALLITHRICIDAE), would be replaced by the next available name, *Saguinus ursulus* Hoffmannsegg, 1807. Although currently regarded as a subspecies of *Saguinus midas* (Linnaeus, 1758), *niger* is unambiguously distinct and in a large faunal monograph Voss, Lunde & Simmons (in press) have elevated it to species rank. The junior name *ursulus* Hoffmannsegg has not been used for many years.
- (d) The name *Canis niloticus* Geoffroy, 1803 for the red fox (Carnivora, CANIDAE) from Egypt, Palestine and Libya would be replaced by *C. aegyptiacus*, attributed to either Desmarest or Sonnini (1816) (these authors were responsible for separate parts of the article in which this name was first published, but not every section is initialed so their different contributions cannot be fully identified).
- (e) The widely used name *Felis* (currently *Herpailurus*) *yagouaroundi* Geoffroy, 1803 for the jaguarundi from South and southern North America (Carnivora, FELIDAE) would be replaced by *F. yaguarondi* Lacépède, 1809 (see Wilson & Reeder, 1993, p. 291).
- (f) The widely used name *Mus* (currently *Proechimys*) *guyannensis* Geoffroy, 1803 for the South American spiny rat (Rodentia, ECHIMYIDAE) would be replaced by *Echimyus cayennensis* Desmarest, 1804 (see Wilson & Reeder, 1993, p. 795).

9. It should be noted that the dates of publication commonly cited for certain names used by Desmarest (see paras. 1 and 3 above) are often inaccurate. Desmarest published up to three descriptions of species originally described and named by Geoffroy (1803) (Table 1). The earliest of these has not always been correctly identified or quoted by those who do not accept Geoffroy (1803) as the author: some were small footnote descriptions in Desmarest (1804b). Corrections to Wilson & Reeder (1993) are as follows: *Mimon crenulatum* (Desmarest, 1804b, not É. Geoffroy, 1810); *Arvicanthis niloticus* (Desmarest, 1804, not Desmarest, 1822); *Xerus erythropus* (Desmarest, 1804b, not Desmarest, 1817); *Gerbillus pyramidum* (Desmarest, 1817, not I. Geoffroy, 1825); and *Dasyprocta cristata* (Desmarest, 1804b, not Desmarest, 1816).

10. In 1996 the late Dr Philip Hershkovitz (then Curator Emeritus, Mammals, Field Museum of Natural History, Chicago, U.S.A.) noted that Étienne Geoffroy's (1803) names were available and that many were used as valid for mammal taxa. He submitted an application to place the *Catalogue* on the Official List of Works Approved as Available for Zoological Nomenclature which, however, has not been published. This text covers the aims of the original application. Placement of the *Catalogue* on the List will stabilise the usage of the names published in it, many of which are in wide circulation. It will avoid either the undesirable nomenclatural changes listed in para. 8 above or a number of applications to the Commission for the conservation of individual names.

11. The International Commission on Zoological Nomenclature is accordingly asked:

- (a) to confirm the work by Étienne Geoffroy Saint-Hilaire (1803) entitled *Catalogue des mammifères du Muséum National d'Histoire Naturelle* as available for nomenclatural purposes;
- (b) to place the above work on the Official List of Works Approved as Available for Zoological Nomenclature.

Table 1. Names established in Geoffroy (1803) together with subsequent citations in the literature

Page numbers are from Geoffroy (1803)

The currently accepted name of the taxon is given in square brackets

- P. 13. *Sagouin niger*. '*Sagoin* [sic] *niger* Geoff.' (nomen nudum) in Desmarest (1804b, p. 3). [*Saguinus midas niger*].
- P. 46. *Vespertilio borbonicus*. '*Vespertilio borbonicus* Geoff.' in Desmarest (1804b, p. 12); '*Vesp. borbonicus*' in É. Geoffroy (1806, p. 201), which was cited by Desmarest (1819, p. 474; 1820, p. 142). [*Scotophilus borbonicus*].
- P. 47. *Pteropus rufus*. [*P. rufus*].
- P. 61. *Phyllostoma crenulata*. '*Phyllos. crenulata* Geoff.' in Desmarest (1804b, p. 12); '*Phyllostoma crenulatum*' in E. Geoffroy (1810b), which was cited by Desmarest (1818, p. 38; 1820, p. 119). [*Mimon crenulatum*].
- P. 69. *Erinaceus aegyptius*. 'Hérisson d'Égypte, Geoffr.' assigned to synonymy of *E. auritus* by Desmarest (1817, p. 381); '*E[rinaceus] Auritus* Pall. ... Gastraeo flavo-fuscus. *E. aegyptius* Geoffr. Catal. de la collect. du Mus. Planch. du Dict. des Sc. nat. fasc. 46' in Fischer (1829, p. 262). [*Hemiechinus auritus aegyptius*].
- P. 77. *Scalopus* for *S. cristatus* and *S. virginianus*. '*Scalops*, genre de mammifères de l'ordre des Plantigrades, établi par le prof. Cuvier' in Desmarest (1804a, p. 14); '*Scalops* Cuv.' in Desmarest (1804b, p. 14); '*Scalops* [sic], Geoff.' in Desmarest (1819, p. 508); '*Scalops* Cuv. Geoff. Illig.' in Desmarest (1820, p. 155). [*Scalopus*].
- P. 113. *Civetta indica*. '*Civetta indica* Geoff.' in Desmarest (1804b, p. 17); '*Viverra indica* Geoff.' in Desmarest (1817, p. 170); '*Viverra indica* Geoff. Collect. du Mus. d'hist. natur.' in Desmarest (1820, p. 210). [*Viverricula indica*].
- P. 124. *Felis yagouaroundi*. *Felis yaguarondi* Lacepède, 1809; '*Felis yaguarondi*, Lacép.' in Desmarest (1816, p. 113); '*Felis yagouaroundi*' in Desmarest (1820, p. 230). [*Herpailurus yagouaroundi* or *H. yaguarondi*].
- P. 134. *Canis niloticus*. '*Canis egyptius* Geoffr.' (nomen nudum) in Desmarest (1804b, p. 18); '*Canis aegyptiacus*, Geoff.' in Desmarest [and Sonnini] (1816, p. 524) [name usually attributed to Sonnini]; '*Canis niloticus* aut *aegyptiacus* Geoff. Collect. du Mus.' in Desmarest (1820, p. 204). [*Vulpes vulpes niloticus* or *V. v. aegyptiacus*].
- P. 140. *Phalangista maculata*. '*Phalangista maculata* Geoff.' in Desmarest (1818, p. 472); '*Phalangista maculata* Geoff. Coll. du Mus.' in Desmarest (1820, p. 261). [*Spilocuscus maculatus*].
- P. 142. *Didelphis nudicaudata*. '*Didelphis nudicaudata* Geoffr.' in Desmarest (1817, p. 424); '*Didelphis nudicaudata* Geoff. Collect. du Mus. d'hist. nat.' in Desmarest (1820, p. 257). [*Metachirus nudicaudatus*].
- P. 165. *Cavia cristata*. '*Cavia cristata* Geoff.' in Desmarest (1804b, p. 25); '*Cavia cristata*, Geoffr.' in Desmarest (1816, p. 213); '*Dasyprocta cristata*. *Cavia* huppé, Geoff. Coll. du Mus.' in Desmarest (1822, p. 358). [*Dasyprocta cristata*].

P. 176. *Sciurus rufiventer*. '*Sc. rufiventer* Geoff.' in Desmarest (1804b, p. 21); '*Sciurus rufiventer* Geoff.' in Desmarest (1817, p. 103); '*Sciurus rufiventer* Geoff. Collect. du Mus.' in Desmarest (1822, p. 333). [*Sciurus niger rufiventer*].

P. 177. *Sciurus pusillus*. '*Sc. pusillus* Geof.' in Desmarest (1804b, p. 21); '*Sc. pusillus* Geoffr.' in Desmarest (1817, p. 109); '*Sciurus pusillus* Geof. Coll. Mus.' in Desmarest (1822, p. 337). [*Sciurillus pusillus*].

P. 178. *Sciurus erythopus* [sic]. '*Sc. erithopus* [sic] Geoff.' in Desmarest (1804b, p. 21); '*Sc. erithopus* [sic]' under the heading of *S. albobittatus* and '*Sciurus albobittatus erythopus* [sic]', '*Sciurus rufo flavescens*, *Sc. erythopus* [sic] Geoff., Collect. du Muséum' in Desmarest (1817, p. 110). [*Xerus*, or *Euxerus*, *erythropus*].

P. 186. *Lemmus albicaudatus*. '*Lemmus albicaudatus*. C'est encore M. Geoffroy Saint-Hilaire qui a distingué cette nouvelle espèce' in Desmarest (1816, p. 81); '*Arvicola albicaudatus*. *Lemmus albicaudatus*, Geoffr. Cat. de la coll. du Mus.' in Desmarest (1822, p. 281). [A senior homonym of *Otomys* (= *Mystromys*) *albicaudatus* A. Smith, 1834?].

P. 186. *Lemmus niloticus*. '*Lemmus niloticus* Geof.' in Desmarest (1804b, p. 23); '*Lemmus niloticus* M. Geoffroy donne ce nom à une nouvelle espèce' in Desmarest (1816, p. 80); '*Arvicola niloticus*. *Lemmus niloticus* Geoff. Descript. de l'Egypte' in Desmarest (1822, p. 281); '*Echimys niloticus*' in É. Geoffroy & Audouin (1829, p. 734). [*Arvicanthus niloticus*].

P. 192. *Mus alexandrinus*. '*Mus alexandrinus* Geoffr., Mém. de l'Institut d'Egypte; Hist. nat., pl. 5, fig. 1' in Desmarest (1819, p. 70); '*Mus alexandrinus* Geof. Mém. de l'hist. d'Egypte' in Desmarest (1822, p. 300); *Mus alexandrinus* in É. Geoffroy & Audouin (1829, p. 733). [*Rattus rattus alexandrinus*].

P. 195. *Mus guyannensis*. '*Mus Guyannensis* Geof.' in Desmarest (1804b, p. 24); '*Echimys cayennensis* Geoffr.' in Desmarest (1817, p. 59); '*Echymis* [lapsus for *Echimys*] *cayennensis*. *Echimys cayennensis*, Geoff. — Rat de la Guyane, ejusd. Coll. Mus. *Echimys cayennensis*, Desm. nouv. Dict d'Hist. nat. tom. 10. pag. 58 [sic]' in Desmarest (1822, p. 292). [*Proechimys guyannensis* or *P. cayennensis*, the latter at first attributed by Desmarest to Geoffroy but then to himself].

P. 195. *Mus cahirinus*. '*Mus cahirinus* Geoffr. St.-Hilaire; — *Echimys* d'Egypte, ejusd., Grand ouvrage sur l'Egypt, partie d'hist. nat., pl. 5, fig. 2' in Desmarest (1819, p. 70); '*Mus cahirinus* Geoff., Collect. du Mus. *Echimys* d'Egypte, Ejusd. Mém. de l'Inst. d'Egypte, partie d'Hist. nat. pl. 5, fig. 2' in Desmarest (1822, p. 309). [*Acomys cahirinus*].

P. 202. *Dipus pyramidum*. '*Gebillus* [lapsus for *Gerbillus*] *pyramidum* nob. *dipus* Geoff.' in Desmarest (1804b, p. 22); '*Dipus pyramidum* Geoffr.' in Desmarest (1817, p. 111; 1822, p. 321), with a description in each publication of the Paris specimen listed under the heading of *Gerbillus aegyptius* = *G. gerbillus* (Olivier, 1800); '*Gerbillus pyramidum*' in I. Geoffroy (1825, p. 321). [*Gerbillus pyramidum*].

P. 213. *Manis crassicaudata*. '*M[anis]. crassicaudata*' in Gray (1827, p. 282); '*Manis crassicaudata*, Geoff. Cat.' in synonymy of *Manis indica* in Lesson (1828, p. 13). [*Manis crassicaudata*].

P. 259. *Antilope equina*. '*Antilope equina* Geoffr.' in Desmarest (1804a, p. 4); '*Antil. equina* Geoffr.' in Desmarest (1804b, p. 32); '*Antilope equina* Geoffr.' in Desmarest

(1816, p. 204); '*Antilope equina* Geoffr. Collect. du Mus. — *Antilope equina*, Ejusd.' in Desmarest (1822, p. 476); '*A. equina*, Geoff, Cat. du Muséum' in Desmoulins (1822, p. 436). [*Hippotragus equinus*].

P. 269. *Antilope caama*. '*Antilope caama*' in G. Cuvier (1804, p. 242); '*Antilope caama*' in Desmarest (1816, p. 196); '*Antilope caama*, Schreb. Goldfuss, p. 1174. Tab. 277' in Desmarest (1822, p. 467); '*A. caama* Schreb. 278.' in Desmoulins (1822, p. 444). [*Alcelaphus buselaphus caama*].

Table 2. Usage of Geoffroy's (1803) names in mammal works of reference

Checklists, regional works and systematic papers are cited

Gray (1827): *Didelphis nudicaudatus*, *D. tricolor* (= *D. brachyura* Schreber, 1777), *Phalangista maculata*, *P. alba* (= *P. rufa*), *Setiger variegatus* (= *Centenes semispinosus* (G. Cuvier, 1798)), *Canis decussatus*, *Canis niloticus*, *Viverra indica*, *Felis yagouaroundi*, *Arvicola fulva*, *Mus cahirinus*, *Dipus pyramidum*, *Sciurus rufiventer*, *S. pusillus*, *S. erythropus* (= *S. ginginianus* Shaw, 1801), *Dasyprocta cristata*.

Hamilton Smith (in Gray, 1827): *Cervus coronatus*, *Antilope equina*.

Fischer (1829): *Didelphis nudicaudata*, *D. tricolor*, *Phalangista maculata*, *P. alba* and *P. rufa* (= *P. cavifrons* (Temminck, 1824)), *Myrmecophaga nigra* (= *M. tamandua* (Cuvier, 1817)), *Erinaceus caninus* and *E. suillus* (= *E. europaeus* Linnaeus, 1758), *E. aegyptius* (= *E. auritus* Gmelin, 1770), *Setiger variegatus* (= *Centetes semispinosus* (G. Cuvier, 1798)), *Pteropus stramineus*, *Mustela rufa*, *Canis niloticus*, *C. decussatus*, *Viverra indica*, *Hyaena fusca*, *Cervus coronatus* (= *C. tarandus* Linnaeus, 1758?), *Antilope equina*, *Sciurus erythropus* (= *S. albovittatus* Desmarest, 1817), *S. rufiventer*, *S. pusillus*, *Dipus pyramidum*, *Lemmus fulvus*, *L. albicaudatus*, *Mus cahirinus*, *M. indicus*, *Dasyprocta cristata*.

Thomas (1888): *Didelphis tricolor* (= *D. brevicaudata* (Erxleben, 1777)), *D. nudicaudata*, *Phalangista petaurista* (= *Petauroides volans* (Kerr, 1792)), *Kangurus philander* (= *Macropus brunii* Schreber, 1758).

Trouessart (1897–1898): *Didelphis tricolor* (= *Peramys brevicaudata* (Erxleben, 1777)), *Metachirus nudicaudata*, *Phalanger maculatus*, *Phalangista petaurista* (= *Petauroides volans* Kerr, 1792)), *Priodontes giganteus*, *Xerus erythropus* [sic].

Andersen (1912): *Pteropus fuscus* (not of Desmarest, 1803 = *P. niger* Kerr, 1792), *P. rufus*, *P. ruber* (= *P. subniger* Kerr, 1792), *P. pusillus* (= *Cynopterus sphinx* (Vahl, 1797)), *P. stramineus* (= *Eidolon helvum* (Kerr, 1792)).

Miller (1912): *Erinaceus suillus* and *E. caninus* (= *E. europaeus* Linnaeus, 1758), *Castor galliae* (= *C. fiber* Linnaeus, 1758), *Lemmus arvalis* (not of Pallas, 1779 = *Clethrionomys glareolus* (Schreber, 1780)), *L. fulvus* (= *Microtus arvalis* (Pallas, 1779)).

Cabrera (1925): *Erinaceus suillus* and *E. caninus* (= *E. europaeus* Linnaeus, 1758), *Setiger* (= *Hemicentetes*, *Tenrec* and *Setifer* in part), *Setiger variegatus* (= *Hemicentetes semispinosus*), *Scalopus*, *S. virginianus* (= *S. aquaticus* (Linnaeus, 1758)).

Allen (1939): *Pteropus stramineus* (= *Eidolon helvum* (Kerr, 1792)), *P. rufus*, *Euxerus erythropus* [sic].

Setzer (1952): *Vulpes vulpes niloticus*, *Gerbillus pyramidum*, *Acomys cahirinus*.

- Cabrera** (1958): *Metachirus nudicaudatus*, *Didelphis tricolor* (= *Monodelphis touan* (Shaw, 1800)), *Priodontes giganteus*, *Myrmecophaga nigra* (= *Tamandua tetradactyla* (Linnaeus, 1758)).
- Cabrera** (1961): *Felis yagouaroundi*, *Proechimys guyannensis*.
- Hill** (1971): *Pteropus rufus*.
- Herschkovitz** (1977): *Saguinus midas niger*.
- Husson** (1978): *Metachirus nudicaudatus*, *Priodontes giganteus*, *Herpailurus yagouaroundi*, *Sciurillus pusillus*, *Proechimys guyannensis*, *Dasypsecta cristata*.
- Hill** (1980): *Scotophilus borbonicus*.
- Hall** (1981): *Scalopus*, *S. virginianus* (= *S. aquaticus* (Linnaeus, 1758)), *Sciurus niger rufiventer*, *Pteromys canadensis* (= *Glaucomys sabrinus* (Shaw, 1801)), *Felis yagouaroundi*.
- Honacki, Kinman & Koepl** (1982): *Scalopus*, *Pteropus rufus*, *Felis yagouaroundi*, *Proechimys guyannensis*.
- Eisenberg** (1989): *Felis* (*Herpailurus*) *yagouaroundi*, *Proechimys guyannensis*.
- Bergmans** (1990): *Pteropus rufus*.
- Corbet & Hill** (1991): *Herpailurus yagouaroundi*, *Proechimys guyannensis*.
- Corbet & Hill** (1992): *Spiloglossus maculatus*, *Pteropus pusillus* (= *Cynopterus sphinx* (Vahl, 1797)).
- Redford & Eisenberg** (1992): *Felis yagouaroundi*.
- Julien-Lefrère** (1994): *Metachirus nudicaudatus*, *Didelphis tricolor* (= *Monodelphis breviceaudata* (Erxleben, 1777)), *Kangurus philander* (= *Wallabia bicolor* (Desmarest, 1803)).
- Grubb et al.** (1998): *Pteropus stramineus* (= *Eidolon helvum* (Kerr, 1792)), *Xerus erythropus*, *Arvicanthis niloticus*.
- Eisenberg & Redford** (1999): *Felis* (*Herpailurus*) *yagouaroundi*, *Proechimys guyannensis*.

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